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September 22, 2017

MEMORANDUM OF EX PARTE COMMUNICATION

Docket: In the Matter of Energy Efficiency Program: Test Procedure for Commercial Refrigeration Equipment. Case Number CR-006

Meeting Date: September 19, 2017

Attendees: Scott Blake Harris (Harris, Wiltshire & Grannis LLP) on behalf of AHT Cooling Systems GmbH and AHT Cooling Systems USA Inc. (collectively AHT); and Acting Assistant Secretary Daniel Simmons and Alexander Fitzsimmons on behalf of the United States Department of Energy.

Meeting Summary: During this meeting, AHT made the following points to support its pending waiver request.

One of the problems with even the best regulation is that it can stifle innovation. Fortunately, DOE has the authority to waive – and then permanently repair or eliminate – energy conservation regulations that stifle innovation. Indeed, the waiver process is the quickest and most effective method of smart deregulation.

Because of their innovative design, many AHT commercial products cannot be fairly evaluated by DOE's energy efficiency testing protocols. One advanced feature of AHT's refrigerator-freezers is that a single unit can operate in three separate modes merely by the turning of a switch. The user can operate the product as an ice cream freezer, as a standard commercial freezer (which is not quite as cold) or as a refrigerator.

But there is no DOE test procedure designed for such multimode machines. Instead, DOE procedures assume that an appliance is either a freezer, an ice cream freezer, or a refrigerator. Thus, the rules require AHT to test a single appliance three times and in different ways.

This approach is unduly burdensome and not reasonably designed for AHT's product. AHT therefore asked for a waiver of DOE procedures so that that it could test such a multimode appliance once, in the mode that uses the most energy – which, since it is the coldest, is the ice cream freezer mode.

Exacerbating the problem is that DOE rules irrationally use entirely different test measurements for ice cream freezers on the one hand, and freezers and refrigerators on the other. And, as DOE has admitted, the test procedures for commercial freezers and refrigerators employ a measure that is inappropriate for transparent-door display products such as AHT's.

In calculating energy efficiency for ice cream freezers, the DOE test uses ***Total Display Area*** (TDA), which it says is appropriate for a display product with transparent doors. This is "because radiation and conduction through doors are the primary heat transfer pathways for … equipment with transparent doors."

But in calculating energy efficiency for freezers and refrigerators, the DOE test uses ***Volume*****,** which DOE says is only appropriate for appliances that have "solid doors" and are "designed for storage." And that is because products with solid (i.e., not transparent) doors "inherently have no TDA, since there is no visible product and thus no glass or other transparent opening."

The reason for the difference is that freezers that are used for display use more energy – because the doors are transparent, and the regulations take that into account. They permit more energy usage. But bizarrely, the regulations incorrectly assume that all freezers have solid doors and are used for storage.

As seen in the attached product photograph, the AHT appliances all have transparent doors and are used for display purposes. Thus, DOE's own words demonstrate that the freezer and refrigerator tests are inappropriate for these appliances, and that the ice cream freezer test is appropriate – which is what AHT seeks in its waiver request.

To put it bluntly, the current test procedures for refrigerators and freezers make no sense for innovative products like AHT's. Fortunately, the Energy Policy and Conservation Act allows DOE both to grant AHT a waiver, and to start a deregulatory rulemaking to fix the problem.

The bottom line is that granting AHT's waiver request for commercial multimode refrigerator-freezers will allow AHT and other similarly situated companies to test their appliances one time which is efficient, in their most energy consumptive mode which is fair, and in the way that DOE says is most appropriate for display products such as these.

Submitted By:

Scott Harris

Scott Blake Harris
Chairman

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AHT Multi-Mode Commercial Refrigerator-Freezer